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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,830	09/28/2001	David A. Bottom	42390P12322	5003

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EXAMINER	
NEURAUTER, GEORGE C	
ART UNIT	**PAPER NUMBER**
2143	

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/966,830	BOTTOM ET AL.	
	Examiner	Art Unit	
	George C. Neurauter, Jr.	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 14-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 14-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *01032006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-11 and 14-26 are currently presented and have been examined.

Response to Arguments

Applicant's arguments filed 30 December 2005 have been fully considered but they are not persuasive.

The Applicant argues that Fee does not teach wherein the election of a second server as the active manager server before the failure of the first server which is currently the active manager server. The Applicant has failed to specifically point out the support for the amendments to the claims, therefore, the Examiner will rely on the specification to determine whether the amendments are adequately supported by the specification.

In view of the specification, it appears that the amendments to the claims and the Applicant's arguments regarding the amended claims are not adequately supported by the specification. Specifically, the Applicant argues that Fee does not teach election of a second server as the active manager server before the failure of the first server which is currently the active manager server and the claimed invention differs from Fee in that the claimed invention does not wait for the election process upon failure. (See page 10, last paragraph of the current response, specifically "...[C]laim 1 recites that the

server to replace the active manager server is elected prior to a failure. Therefore, the transition in claim 1 is seamless, as opposed to Fee, because, as recited in claim 1, there is no need to wait for the election process upon failure.")

The specification discloses:

"Upon failure of the managing server, such as when not meeting a certain predetermined criteria, another server is reelected as active server to replace the previous active server to continue with the nonstop management of the chassis and remaining servers." (Abstract)

"A system, apparatus, and method are provided for management of a modular server architecture to achieve high-availability. According to one embodiment of the present invention, a server in the chassis is automatically elected as a managing server or active server to host system management. The active server runs service for all servers operating in the chassis. Upon failure of the managing server, such as when not meeting a certain predetermined criteria, another server is elected as active server to replace the previous active server to continue with the management of the chassis and remaining servers." (paragraph 0019)

"In the event of a failure of the active manager server 105, another server 130 may automatically be elected as the

active manager server, providing continuous management of the chassis and remaining servers." (paragraph 0032)

"Once elected, the active manager 310 performs its duties until it fails or shuts down for some reason, such as an upgrade. In any event, when the active manager 310 fails, or is to be replaced, another election process takes place to elect the next active manager." (paragraph 0048)

"However, in the event the active manager fails, a re-election process may take place to elect a next active manager in processing block 430. The re-election process may be performed based on the same predetermined factors/criteria as applied in the initial election process." (paragraph 0051)

Therefore, the specification lacks support for the amended claims and the Applicant's amendments and arguments do not correspond with the specification. Further, the Applicant has admitted on the record that Fee does in fact disclose that upon failure, the election process begins to decide where to relocate applications within the chassis (see page 10, last paragraph of the response filed). Therefore, in view of these disclosures in Fee and the rejection previously shown by the Examiner, Fee does disclose these limitations in view of the teachings of Fee to which the Applicant readily admits.

If the Applicant traverses the Examiner's findings, the Applicant must specifically point out where the amendments have support within the specification.

Further, Fee discloses as noted previously:

"At start-up or after a system change (module failure/removal, etc.), an election process is required to discover the best location(s) to run a management application(s)." (column 3, lines 33-37)

In view of these further disclosures and suggestions of Fee which further distinguish the teachings of Fee previously shown by the Examiner, Fee does contemplate that all of the servers within the chassis are considered to become the active manager server and that one or more servers may be selected to be an active server manager before the failure of a server.

The Applicant also argues that the election process in Fee is application-dependent and the claimed invention does not have this constraint. However, it is noted that this feature is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regardless of whether these limitations are recited in the claim, as shown previously by the Examiner, Fee discloses

wherein a new server or servers may be elected which run management applications in to become an active manager server.

Therefore, the claims are not in condition for allowance. All of the current rejections of the claims are based upon the current version of the claims as presented in the current response.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 and 14-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims recite "electing a second server to replace the first server to act as the active manager server...if the first server fails..." This subject matter was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-4, 6, 9-13, 15-21, and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5 522 042 A to Fee et al.

Regarding claim 1, Fee discloses a method comprising:

electing a first server (referred to throughout the reference as "module") as active manager server ("best location...to run the chassis application(s)"), wherein the first server resides in a chassis and the active manager to run services for each server in the chassis; electing a second server to replace the first server to act as the active server manager based on predetermined criteria if the first server fails, wherein the second server resides in the chassis; receiving an indication that the first server has failed,

wherein the indication is based on health matrices and performance matrices; automatically replacing the first server with the second server as the active manager server in response to the indication received; and redirecting requests for the first server to the second server. (column 3, lines 33-47; column 7, line 47-column 8, line 5, specifically column 7, lines 49-53)

Regarding claim 3, Fee discloses the method of claim 1, further comprising:

extracting the health metrics and performance metrics ("resources"), wherein the health metrics and performance metrics are dynamic; replicating the health metrics and performance metrics, wherein the replicating the health metrics and performance metrics is performed periodically; and dynamically updating a database ("slot table") populated with the health metrics and performance metrics. (column 7, lines 19-39)

Regarding claim 4, Fee discloses the method of claim 3, wherein the health metrics are server-based. (column 7, lines 19-39)

Regarding claim 6, Fee the method of claim 3, wherein the performance metrics comprise operating system-based metrics,

kernel-based metrics, and server-based metrics. (column 7, lines 19-39)

Regarding claim 9, Fee discloses the method of claim 3, further comprising replicating identification information, wherein the identification information is static. (column 7, lines 29-31)

Regarding claim 10, Fee discloses a high-availability management system comprising:

a chassis comprising a plurality of slots; (column 4, lines 44-49)

a plurality of server modules coupled with the plurality of slots, wherein a first server module of the plurality of server modules is elected as an active manager server, the active manager to run services for each of the plurality of server modules; a second server module elected to replace the first server to act as the active manager server based on a predetermined criteria if the first server module fails an indication to automatically determine if the first server module as failed or has been overloaded, wherein the indication is generated based on health matrices and performance matrices; a second server module to automatically replace the first server module as the active manager server in response to the indication received; and a redirection process to redirect

requests for the first server module to the second server module. (column 4, lines 44-49; column 7, line 47-column 8, line 5, specifically column 7, lines 49-53)

Regarding claim 11, Fee discloses the high-availability management system of claim 10, further comprising a database ("slot table") coupled to the chassis for storing information regarding chassis identification, slot identification, and server module type. (column 6, line 50-column 7, line 19, specifically "Chassis IP address", "Slot ID", and "Module Type")

Regarding claim 12, Fee discloses the high-availability management system of claim 10, wherein the first server module of the plurality of server modules is elected the active manager server based on a predetermined criteria. (column 7, line 47-column 8, line 5, specifically column 7, lines 53-61)

Regarding claim 13, Fee discloses the high-availability management system of claim 10, wherein a second server module of the plurality of server modules is elected the active manager server, based on the predetermined criteria, to replace the first server module as the active manager server when the first server module is to be replaced. (column 7, line 47-column 8, line 5, specifically column 7, lines 49-53)

Regarding claim 14, Fee discloses the high-availability management system of claim 10, wherein the election of the first

server module as the active manager server is performed by middleware, wherein the middleware is a software. (column 7, line 47-column 8, line 5, specifically column 7, lines 62-65)

Regarding claim 15, Fee discloses the high-availability management system of claim 13, wherein the election of the second server module as the active manager server is performed by the middleware. (column 7, line 47-column 8, line 5, specifically column 7, lines 62-65)

Regarding claim 16, Fee discloses the high-availability management system of claim 10, wherein the first server module is elected from a group comprising servers, telephone line cards, and power substations. (column 4, lines 44-49; column 7, line 47-column 8, line 5, specifically column 7, lines 49-61, specifically line 60)

Regarding claim 17, Fee discloses a method of uninterrupted management using sticky identification comprising:

assigning a chassis identification ("Chassis IP address") to a chassis coupled to a computer, wherein the chassis comprises a slot (column 4, lines 44-49); assigning a slot identification ("Slot ID") to the slot based on the slot's location in the chassis; assigning a server module type ("Module Type") to the slot based on the chassis identification and the slot identification, wherein the server module type indicates

server module characteristics; (column 6, line 50-column 7, line 19)

electing a first server module as active manager server, wherein the first server module resides in the chassis; determining automatically, by receiving an indication, if the first server module has failed or has been overloaded, wherein the indication is generated based on health matrices and performance matrices; electing a second server module automatically as the active manager server to replace the first server module as the active manager server in response to the indication received, wherein the second server module resides in the chassis; and redirecting requests for the first server module to the second server module. (column 4, lines 44-49; column 7, line 47-column 8, line 5, specifically column 7, lines 49-53)

Regarding claim 18, Fee discloses the method of uninterrupted management using sticky identification of claim 17, further comprising retaining the server module characteristics corresponding to the server module type. (column 7, lines 6-19)

Regarding claim 19, Fee discloses the method of uninterrupted management using sticky identification of claim 17, further comprising:

removing a first server module from the slot; coupling a second server module to the slot; and managing the second server module based on the server module characteristics corresponding to the server module type, wherein the managing the second server module is performed without updating a network management system. (column 3, line 63-column 4, line 4)

Regarding claim 20, Fee discloses the method of uninterrupted management using sticky identification of claim 17, further comprising:

assigning a user-defined chassis identification; ("Chassis IP address")

assigning a user-defined slot identification; ("Slot ID")

assigning a user-defined module identification; ("Module Type") and

retaining the user-defined chassis identification and the user-defined slot identification and the user-defined module identification. (column 7, lines 19-28)

Claims 21 and 23 are also rejected since claims 21 and 23 recite a machine readable medium that contain substantially the same limitations as recited in claims 1 and 3 respectively.

Claims 24-26 are also rejected since claims 24-26 recite a machine readable medium that contain substantially the same limitations as recited in claims 17-19 respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that

was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fee et al.

Regarding claim 2, Fee discloses the method of claim 1, wherein the election is performed based on a predetermined criteria. (column 7, line 47-column 8, line 5, specifically column 7, lines 53-61)

Fee does not expressly disclose wherein the predetermined criteria comprises electing a server with the lowest IP address as the active manager server, however, Fee does disclose electing a server with the lowest slot number as the active manager server and also broadly suggests that other form of predetermined criteria may be used to elect an active manager server if necessary (column 7, line 47-column 8, line 5, specifically column 7, line 67-column 8, line 3). Fee also discloses that each server has an IP address (column 7, line 15).

It would have been obvious to one skilled in the art at the time the invention was made to elect a server based on the lowest IP address because the Applicant has not disclosed that

using the limitation undisclosed in Fee provides any sort of an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the method of electing a active manager server based on the lowest slot number described in Fee as recited in the claim because, in absence of any disclosure by the Applicant of specifically why electing based on the lowest IP address has any sort of advantage over, for example, a random selection of a server, Fee's method of electing an active manager server based on the lowest slot number or any other predetermined criterion as shown in Fee would perform equally as well as the Applicant's method of selecting by the lowest IP address, something which Fee suggests is possible based on the above disclosures.

Claim 22 is rejected since claim 22 recites a machine readable medium that contains substantially the same limitations as recited in claim 2.

Claims 5, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fee et al. in view of US Patent Application Publication 2002/0062454 A1 to Fung.

Regarding claim 5, Fee discloses the method of claim 3.

Fee does not expressly disclose wherein the health metrics comprise tracking power levels and temperature levels based on

predetermined thresholds, however, Fee does suggest that metrics other than those disclosed may be also be tracked (column 7, lines 33-39)

Fung discloses the above limitations (paragraphs 0138-0139)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method as disclosed in Fee with the tracking of power levels and temperature levels as disclosed in Fung since Fung discloses that tracking power levels enables an active server manager ("Management Module") to shut down or cycle power on a server module (paragraph 0139, lines 2-6) and tracking temperature levels enables an active server manager to control the operation of fans to keep temperatures at an appropriate level (paragraph 0138, lines 2-6). Fung also discloses that predetermined thresholds enable notification of a user or the active server manager (paragraph 0138, lines 6-8; paragraph 0139, lines 10-12) Based on these specific advantages disclosed in Fung and that both references are directed to server module monitoring using an active server module, one of ordinary skill in the art would have appreciated the advantages disclosed in Fung and would have been motivated to combine the teachings of the references since both references would be considered to be analogous based on their related fields of endeavor.

Regarding claim 7, Fee discloses the method of claim 3, wherein the performance metrics comprise tracking CPU utilization and memory utilization. (column 7, lines 33-39)

Fee does not expressly disclose wherein tracking the CPU utilization and memory utilization is based on predetermined thresholds, however, Fund does disclose these limitations (paragraph 0138, lines 6-8; paragraph 0139, lines 10-12).

Claim 7 is rejected since the motivations regarding the obviousness of claim 5 also apply to claim 7.

Regarding claim 8, Fee discloses the method of claim 3.

Fee does not expressly disclose wherein the method further comprises an alert mechanism to alert whenever the health metrics or the performance metrics violate the predetermined thresholds, however, Fung does disclose these limitations (paragraph 0138, lines 6-8; paragraph 0139, lines 10-12).

Claim 8 is rejected since the motivations regarding the obviousness of claim 5 also apply to claim 7.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is (571) 272-3918. The examiner can normally be reached on Monday through Friday from 9AM to 5:30PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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